- 13 -

ABSTRACT

Three techniques applicable to photogrammetric systems are taught. The first one is for performing camera position approximation, wherein an image is taken and using this image, it is possible to approximate the position the camera was in when taking the picture. The second technique is for reconstructing planar objects using one image with the planar object present in the image. The third technique is a precision estimation method of reconstructed points. The system performs for each points of interest a simulation of the physical process of image capture, calibration, and reconstruction. The simulation is based on the given tolerances for the system parameters.

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